

REMARKS

The present invention is a wireless communication system, a terminal in a wireless communication system including a plurality of wireless terminals and a predefined group comprising a plurality of wireless terminals forming the group which wirelessly communicate with each other. In accordance with an embodiment of the invention, a plurality of wireless terminals 12 are in wireless communication 14 with each other. The individual wireless terminals of the predefined group include at least one function in addition to performing wireless communication with each other which is common to the plurality of wireless terminals of the group and at least one function which is not common to the individual wireless terminals of the group which is shared with other wireless terminals while in the group. See paragraph [0020] of the Substitute Specification.

The sharing of at least one additional function provided from individual wireless terminals to the predefined group provides the group with at least one additional function so that a total number of available functions to the group is greater than a total number of available functions available to individual wireless terminals of the group when the individual wireless terminals are not in the group.

The functions include software applications, facilities or functions which may become enabled when a group reaches a set size. See paragraph [0022] of the Substitute Specification.

The plurality of terminals 12 of the predefined group are in wireless communication with each other, including providing sharing of functions therebetween. The wireless communication system communicates with the wireless terminals to determine if each of the terminals belonging to the predefined group has a recognized identification in the wireless communication system and upon confirmation received by the wireless communication

system from the wireless terminals that the wireless terminals have a recognized identification, the wireless communication system initiates a group session with the predefined group during which sharing of the at least one function, which is not common to the wireless terminals may occur between the wireless terminals. See paragraphs [0018] through [0021] of the Substitute Specification.

Claims 19-21, 25-28, 36-39, 42-43, 45-46 and 48-49 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent 6,604,140 (Beck et al) in view of U.S. Publication 2002/0037736 (Kawaguchi et al). With respect to claim 19, the Examiner reasons as follows:

Claims 19 - 21, 25 - 28, 36 - 39, 42 - 43, 45 - 46, and 48 - 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. (US 6,604,140) in view of Kawaguchi et al. (US 2002/0037736).

Regarding Claim 19, Beck teaches a wireless communication system, comprising: a plurality of wireless terminals, individual wireless terminals performing at least one function in addition to performing wireless communication with each other, which is common to the individual terminals (Figure 1, Column 3 lines 41 - 43, Column 3 lines 52 - 53, Column 4 lines 6 - 13, Column 4 lines 61 - 63, the mobile devices can perform the function of advertising services and using services), and performing at least one function which is not common to individual wireless terminals (Column 4 lines 63 - 67, Column 5 lines 1 - 22, Column 5 lines 38 - 60, the mobile devices (service users) can access other needed services, that said service users do not possess, by communicating with other mobile devices (service advertisers) that have said services via an ad hoc network, this means that said service advertisers possess additional functionalities that said service users do not possess); and the terminals sharing the at least one function which is not common to each of the wireless terminals so that a total number of functions available to be performed by the individual terminals, in addition to performing the wireless communication with each other, is greater than a total number of functions available to be performed by the individual terminals when the individual terminals are not in communication with one another (Column 4 lines 63 - 67, Column 5 lines 1 - 22, Column 5 lines 38 - 60, the mobile devices (service users) can access other needed services, that said service users do not possess, by communicating with other mobile devices (service advertisers) that have said services via an ad hoc network, said service users will therefore have access to a greater number of services thus expanding their functionality).

Beck does not specifically teach the terminals being in wireless communication with each other to form a group there-between.

Kawaguchi teaches the terminals being in wireless communication with each other to form a group there-between (Section 0006 lines 1 - 4).

Beck and Kawaguchi both teach an ad hoc network that uses the Bluetooth protocol thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the group communication method taught in Kawaguchi in the ad hoc network of Beck for the purpose of enabling each mobile device to autonomously identify other mobile devices so as to build up a flexible communication network.

These grounds of rejection are traversed for the following reasons.

Each of the independent claims recite substantively a plurality of wireless terminals in a predefined group with the terminals being in wireless communication with each other including providing sharing of functions between the wireless terminals of the predefined group and furthermore, the wireless communication system communicates with the wireless terminals to determine if each of wireless terminals belonging to the predefined group has a recognized identification in the wireless communication system and upon confirmation received by the wireless communication system from the wireless terminals that the wireless terminals have the recognized identification, the wireless communications system initiates a group session with the predefined group during which sharing of the at least one function which is not common to the terminals may occur between the terminals. This subject matter is not taught alone or by the combined teachings of Beck et al and Kawaguchi et al. While Beck et al do teach the sharing of services between devices or terminals, there is no teaching regarding the forming of a predefined group. While Kawaguchi et al do teach the formation of a group in which communications can occur between members, the aforementioned operation of the wireless communications system to determine if each of the terminals belonging to the group has an identification recognized by the wireless communications system and upon confirmation received from the wireless terminals that the

wireless terminals have a recognized identification received by the wireless communication system, the wireless communication system initiates a group session with the predefined group during which sharing of the at least one function which is not common to the wireless terminals may occur between the wireless terminals. Kawaguchi et al, while disclosing the formation of a closed users group (CUG), such group does not interact in the claimed manner with respect to the wireless communication system and performs communications of transmitting messages in a multicast, unicast, or point to multipoint connection as described, for example, in paragraph [0120] which is not a disclosure of the formation of the claimed group session.

There is no basis in the record why a person of ordinary skill in the art would be led to modify the teachings of Beck et al and Kawaguchi et al to arrive at the subject matter of the rejected claims.

Claims 22-24 stand rejected under 35 U.S.C. §103 as being unpatentable over Beck et al in view of Kawaguchi et al further in view of United States Patent 6,215,500 (Callaway, Jr. et al). Callaway, Jr. et al have been cited as teaching the formation of a group including a minimum of two and a maximum of seven terminals. This does not cure the deficiencies noted above with respect to Beck et al and Kawaguchi et al.

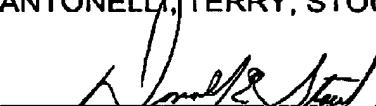
Claims 29-35, 40-41 and 44, 47 and 50 stand rejected under 35 U.S.C. §103 as being unpatentable over Beck et al in view of Kawaguchi et al further in view of Callaway, Jr. Callaway, Jr. has been cited as teaching the architecture of a master terminal in a group of slave terminals. This does not cure the deficiencies noted above with respect to the teachings of Beck et al and Kawaguchi et al.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (0171.39605X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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